

§ 715.20

(A) At structures owned by the permittee and not leased to another person.

(B) At structures owned by the permittee and leased to another person, if a written waiver by the lessee is submitted to the regulatory authority before blasting.

(3) *Records of blasting operations.* A record of each blast, including seismograph reports, shall be retained for at least 3 years and shall be available for inspection by the regulatory authority and the public on request. The record shall contain the following data—

(i) Name of permittee, operator, or other person conducting the blast;

(ii) Location, date, and time of blast;

(iii) Name, signature, and license number of blaster-in-charge;

(iv) Direction and distance, in feet, to nearest dwelling, school, church, or commercial or institutional building neither owned or leased by the permittee;

(v) Weather conditions;

(vi) Type of material blasted;

(vii) Number of holes, burden, and spacing;

(viii) Diameter and depth of holes;

(ix) Types of explosives used;

(x) Total weight of explosives used;

(xi) Maximum weight of explosives detonated within any 8 millisecond period;

(xii) Maximum number of holes detonated within any 8 millisecond period;

(xiii) Methods of firing and type of circuit;

(xiv) Type and length of stemming;

(xv) If mats or other protections were used;

(xvi) Type of delay detonator used, and delay periods used;

(xvii) Seismograph records, where required, including—

(A) Seismograph reading, including exact location of seismograph and its distance from the blast;

(B) Name of person taking the seismograph reading; and

(C) Name of person and firm analyzing the seismograph record.

[42 FR 62680, Dec. 13, 1977; 43 FR 2722, Jan. 19, 1978, as amended at 48 FR 9805, Mar. 8, 1983]

30 CFR Ch. VII (7–1–13 Edition)

§ 715.20 Revegetation.

(a) *General.* (1) The permittee shall establish on all land that has been disturbed, a diverse, effective, and permanent vegetative cover of species native to the area of disturbed land or species that will support the planned postmining uses of the land approved according to § 715.13. For areas designated as prime farmland, the reclamation procedures of § 716.7 shall apply.

(2) Revegetation shall be carried out in a manner that encourages a prompt vegetative cover and recovery of productivity levels compatible with approved land uses. The vegetative cover shall be capable of stabilizing the soil surface with respect to erosion. All disturbed lands, except water areas and surface areas of roads that are approved as a part of the postmining land use, shall be seeded or planted to achieve a vegetative cover of the same seasonal variety native to the area of disturbed land. If both the pre- and postmining land use is intensive agriculture, planting of the crops normally grown will meet the requirement. Vegetative cover will be considered of the same seasonal variety when it consists of a mixture of species of equal or superior utility for the intended land use when compared with the utility of naturally occurring vegetation during each season of the year.

(3) On Federal lands, the surface management agency shall be consulted for approval prior to revegetation regarding what species are selected, and following revegetation, to determine when the area is ready to be used.

(b) *Use of introduced species.* Introduced species may be substituted for native species only if appropriate field trials have demonstrated that the introduced species are of equal or superior utility for the approved postmining land use, or are necessary to achieve a quick, temporary, and stabilizing cover. Such species substitution shall be approved by the regulatory authority. Introduced species shall meet applicable State and Federal seed or introduced species statutes, and shall not include poisonous or potentially toxic species.

(c) *Timing of revegetation.* Seeding and planting of disturbed areas shall be

conducted during the first normal period for favorable planting conditions after final preparation. The normal period for favorable planting shall be that planting time generally accepted locally for the type of plant materials selected to meet specific site conditions and climate. Any disturbed areas, except water areas and surface areas or roads that are approved under § 715.13 as part of the postmining land use, which have been graded shall be seeded with a temporary cover of small grains, grasses, or legumes to control erosion until an adequate permanent cover is established. When rills or gullies, that would preclude the successful establishment of vegetation or the achievement of the postmining land use, form in regraded topsoil and overburden materials as specified in § 715.14, additional regrading or other stabilization practices will be required before seeding and planting.

(d) *Mulching.* Mulch shall be used on all regraded and topsoiled areas to control erosion, to promote germination of seeds, and to increase the moisture retention of the soil. Mulch shall be anchored to the soil surface where appropriate, to insure effective protection of the soil and vegetation. Mulch means vegetation residues or other suitable materials that aid in soil stabilization and soil moisture conservation, thus providing micro-climatic conditions suitable for germination and growth, and do not interfere with the postmining use of the land. Annual grains such as oats, rye and wheat may be used instead of mulch when it is shown to the satisfaction of the regulatory authority that the substituted grains will provide adequate stability and that they will later be replaced by species approved for the postmining use.

(e) *Methods of revegetation.* (1) The permittee shall use technical publications or the results of laboratory and field tests approved by the regulatory authority to determine the varieties, species, seeding rates, and soil amendment practices essential for establishment and self-regeneration of vegetation. The regulatory authority shall approve species selection and planting plans.

(2) Where hayland, pasture, or range is to be the postmining land use, the species of grasses, legumes, browse, trees, or forbes for seeding or planting and their pattern of distribution shall be selected by the permittee to provide a diverse, effective, and permanent vegetative cover with the seasonal variety, succession, distribution, and regenerative capabilities native to the area. Livestock grazing will not be allowed on reclaimed land until the seedlings are established and can sustain managed grazing. The regulatory authority, in consultation with the permittee and the landowner or in concurrence with the governmental landmanaging agency having jurisdiction over the surface, shall determine when the revegetated area is ready for livestock grazing.

(3) Where forest is to be the postmining land use, the permittee shall plant trees adapted for local site conditions and climate. Trees shall be planted in combination with an herbaceous cover of grains, grasses, legumes, forbs, or woody plants to provide a diverse, effective, and permanent vegetation cover with the seasonal variety, succession, and regeneration capabilities native to the area.

(4) Where wildlife habitat is to be included in the postmining land use, the permittee shall consult with appropriate State and Federal wildlife and land management agencies and shall select those species that will fulfill the needs of wildlife, including food, water, cover, and space. Plant groupings and water resources shall be spaced and distributed to fulfill the requirements of wildlife.

(f) *Standards for measuring success of revegetation.* (1) Success of revegetation shall be measured on the basis of reference areas approved by the regulatory authority. Reference areas mean land units of varying size and shape identified and maintained under appropriate management for the purpose of measuring ground cover, productivity and species diversity that are produced naturally. The reference areas must be representative of geology, soils, slope, aspect, and vegetation in the permit area. Management of the reference area shall be comparable to that which will be required for the approved

§ 715.200

postmining land use of the area to be mined. The regulatory authority shall approve the estimating techniques that will be used to determine the degree of success in the revegetated area.

(2) The ground cover of living plants on the revegetated area shall be equal to the ground cover of living plants of the approved reference area for a minimum of two growing seasons. The ground cover shall not be considered equal if it is less than 90 percent of the ground cover of the reference area for any significant portion of the mined area. Exceptions may be authorized by the regulatory authority for—

(i) Previously mined areas that were not reclaimed to the standards required by this chapter prior to the effective date of these regulations. The ground cover of living plants for such areas shall not be less than required to control erosion, and in no case less than that existing before redisturbance.

(ii) Areas to be developed immediately for industrial or residential use. The ground cover of living plants shall not be less than required to control erosion. As used in this paragraph, *immediately* means less than 2 years after regrading has been completed for the area to be used; and

(iii) Areas to be used for agricultural cropland purposes. Success in revegetation of cropland shall be determined on the basis of crop production from the mined area compared to the reference area. Crop production from the mined area shall be equal to that of the approved reference area for a minimum of two growing seasons. Production shall not be considered equal if it is less than 90 percent of the production of the reference area for any significant portion of the mined area.

(3) Species diversity, distribution, seasonal variety, and vigor shall be evaluated on the basis of the results which could reasonably be expected using the methods of revegetation approved under paragraph (e) of this section.

(g) *Seeding of stockpiled topsoil.* Topsoil stockpiled in compliance with § 715.16 must be seeded or planted with an effective cover of nonnoxious, quick growing annual and perennial plants during the first normal period for fa-

30 CFR Ch. VII (7–1–13 Edition)

vorable planting conditions or protected by other approved measures as specified in § 715.16.

§ 715.200 Interpretative rules related to general performance standards.

The following interpretations of rules promulgated in part 715 of this chapter have been adopted by the Office of Surface Mining Reclamation and Enforcement.

(a)–(b) [Reserved]

(c) *Interpretation of § 715.16(a)(4)—Topsoil Removal.* (1) Results of physical and chemical analyses of topsoil and selected overburden materials to demonstrate that the selected overburden materials or overburden materials/topsoil mixture is more suitable for restoring land capability and productivity than the available topsoil, provided the analyses, trials, or tests are certified by a qualified soil scientist or agronomist, may be obtained from any one or a combination of the following sources:

(i) U.S. Department of Agriculture Soil Conservation Service published data based on established soil series;

(ii) U.S. Department of Agriculture Soil Conservation Service Technical Guides;

(iii) State agricultural agency, university, Tennessee Valley Authority, Bureau of Land Management or U.S. Department of Agriculture Forest Service published data based on soil series properties and behavior; or

(iv) Results of physical and chemical analyses, field site trials, or greenhouse tests of the topsoil and overburden materials (soil series) from the permit area.

(2) If the operator demonstrates through soil survey or other data that the topsoil and unconsolidated material are insufficient and substitute materials will be used, only the substitute materials must be analyzed in accordance with 30 CFR 715.16(a)(4)(i).

(Sec. 501, 502, 504, 508, 515, 516, Pub. L. 95–87, 91 Stat. 467, 468, 471, 478, 492, 496 (30 U.S.C. 1251, 1252, 1254, 1258, 1265, 1266))

[45 FR 26000, Apr. 16, 1980 and 45 FR 39447, June 10, 1980, as amended at 45 FR 73946, Nov. 7, 1980]